WE CLAIM:

1. A system for the secure exchange of date between a sender device and a receiver device comprising

a sender device configured to encrypt selected data for communication to a receiver device, the sender device also configured to initiate a first transmission across a communications link,

a server linked to the sender device by the communications link, the server configured to receive a transmission initiated by the sender device, to verify the authenticity of the sender device, to initiate a second transmission to the receiver device, and to verify the authenticity of the receiver device, the server further configured to permit linkage of the sender device and the receiver device for communication of the encrypted data without routing through the server following verification of authenticity of both the sender device and the receiver device,

the receiver device configured to respond to the second transmission from the server and to receive the selected encrypted data from the sender device, and further configured to decrypt the selected data.

2. A method of securely exchanging data between a sender and a receiver comprising the steps of

selecting data to be transmitted from the sender to the receiver, encrypting the data,

initiating a first transmission to a trusted service provider, the first transmission containing encrypted data sufficient to verify the authenticity of the sender and the identity of the receiver,

verifying, in response to the first transmission, the authenticity of the sender,

initiating from the trusted service provider, upon verification of the authenticity of the sender, a second transmission to connect to and verify the authenticity of the receiver,

verifying the authenticity of the receiver,

linking the sender and the receiver for delivery of the selected data

3. Apparatus for facilitating the secured exchange of data including

a pair of interfaces capable of transmitting and receiving, via the public switched telephone network, data from at least two secured data exchange devices,

an encipher/decipher unit capable of decrypting an identity identifier received from one of said data exchange devices which corresponds to the other of said data exchange

devices,

a control unit capable of originating a data connection to one of said data exchange devices via one of said interfaces to said public switched telephone network.

- (d) a switch capable of connecting said interfaces and linking connections to said data exchange devices.
- 4. The invention of claim 1 in which the communications link is a public switched telephone network.
- 5. The invention of claim 1 in which the communications link is a private branch exchange.
- 6. The invention of claim 1 in which the communications link is a wide area network.
- 7. The system of claim 1 further including a billing system for recording usage of said system.
- 8. The system of claim 7 wherein said billing system is connected to said public switched telephone network and is configured to submit charges to appear on a telephone bill of a user of said system.
- 9. The system of claim 6 wherein said billing system obtains payment from said user by an electronic payment mechanism.
- 10. The system of claim1 wherein the system protects the anonymity of both the sender device and the receiver device.
- 14. The system of claim 1 further including an auditing system for recording usage of said system and for recording operational errors.
- 18. The system of claim 1 further including at least two modems, each communicating with one of said two interfaces.
- 19. The system of claim 18 wherein said switch and said modems are digital, and the switch connects digital outputs of said modems.
- 20. The system of claim 1 wherein at least one of said interfaces is a T1 telephone connection.